

MEMORANDUM FOR THE RECORD

Based on my review of official investigations and public records regarding this mishap as well as extensive discussions with aviation experts, I, U.S. Congressman Walter B. Jones, have concluded that the fatal factor in the crash of an MV-22 Osprey on April 8, 2000 in Marana, Arizona was the aircraft's lack of a Vortex Ring State (VRS) warning system as well as the pilots' lack of critical training regarding the extreme dangers of VRS onset in the Osprey. I also believe the Marine Corps has blamed the mishap on the pilots' drive to accomplish the mission and a combination of aircrew human factors. Lieutenant Colonel Brow and Major Gruber and their families are dishonored by the assertion that the aircrew was in any way responsible for this fatal accident. Therefore, I request that the following findings be included in all official records relating to this mishap:

1. The fatal crash of an MV-22 on April 8, 2000, in Marana, Arizona, was not a result of air crew human factors or pilot error that can be attributed to the late Lieutenant Colonel John A. Brow or the late Major Brooks S. Gruber who competently and professionally performed their duties as United States Marine Corps aviators.

2. The fatal factor in the crash of an MV-22 on April 8, 2000, was the aircraft's lack of a Vortex Ring State (VRS) warning system and the Department of the Navy's failure to provide the pilots with critical training regarding the extreme dangers of VRS onset in the MV-22.

3. Because of inadequate High Rate of Descent (HROD) and VRS developmental testing, the pilots of the MV-22 involved in the accident on April 8, 2000, were not trained or able to recognize, avoid, or recover from VRS onset in the MV-22.

4. Had adequate HROD and VRS developmental testing been conducted prior to the Operational Evaluation of April 8, 2000, and had a VRS warning system been installed in the aircraft, Lieutenant Colonel Brow and Major Gruber would have been better able to avoid or recover from VRS.

5. LtCol Brow and Maj Gruber were in formation behind another MV-22. The lead aircraft had overshot its intended approach angle and therefore steepened the approach angle. Unaware of the extreme dangers of VRS onset in the MV-22, LtCol Brow and Maj Gruber slowed their airspeed and descended even quicker, to maintain position on the lead aircraft. Twenty three seconds prior to the crash, the co-pilot of the lead aircraft stated "If you want you can take it long if you need to or you can wave it off. It's your call. You're hanging dash two out there." The lead aircraft pilot decided to continue his rapid descent at a slow forward airspeed, clearly oblivious of the extreme dangers of VRS onset in the MV-22.

6. Numerous reviews and investigations following the mishap have documented that the pilots of the mishap aircraft were not provided with the necessary and critical knowledge and training to recognize, avoid or recover from the extreme dangers of Vortex Ring State (VRS) onset in the MV-22 and the potential for sudden loss of controlled flight in the MV-22 following VRS onset.

7. After the mishap, Naval Air Systems Command (NAVAIR) called for a thorough investigative flight test program to find the boundaries of VRS, characterize its handling qualities, and establish the basis for a new flight limitation, pilot procedures, and a cockpit warning system.

8. As a result of testing following the fatal accident, a visual and aural cockpit warning system was developed to alert the aircrew when the aircraft exceeded the NATOPS flight manual's rate-of-descent limit.

9. On July 27, 2000, the Marine Corps publicly announced in a press release that a combination of "human factors" caused the April 8, 2000 crash. The press release went on to implicate the mishap aircraft pilots by stating that "deviations from the scheduled flight plan, an unexpected tailwind and the pilot's extremely rapid rate of descent into the landing zone created conditions that led to the accident." The release also stated that "although the report stops short of specifying pilot error as a cause, it notes that the pilot of the ill-fated aircraft significantly exceeded the rate of descent established by regulations for safe flight." In this Official USMC press release, Marine Corps Commandant Gen. James L. Jones is quoted as saying: "the tragedy is that these were all good Marines joined in a challenging mission. Unfortunately, the pilots' drive to accomplish that mission appears to have been the fatal factor."

10. This clearly damaging language is inaccurate, based on the fact that at the time of the crash, adequate testing of the MV-22 in the High Rate of Descent/Vortex Ring State (HROD/VRS) regime had not been conducted, the MV-22 did not have a VRS warning system, and the pilots did not have adequate knowledge and training to recognize and avoid the extreme dangers of Vortex Ring State (VRS) onset in the MV-22 and the potential for sudden loss of controlled flight in the MV-22 following VRS onset.

11. According to the Government Accountability Office (GAO), the Commander, Operational Test and Evaluation Force's V-22 Operational Evaluation (OPEVAL) report indicated that the MV-22 "Naval Air Training and Operating Procedures Standardization (NATOPS) manual lacked adequate content, accuracy, and clarity at the time of the accident. Additionally, because of incomplete developmental testing in the High Rate of Descent (HROD) regime, there was insufficient explanatory or emphatic text to warn pilots of hazards of operating in this area. The flight simulator did not replicate this loss of controlled flight regime." Also, the preliminary NATOPS manual and V-22 ground school syllabus provided insufficient guidance/warning as to high rate of descent/slow airspeed conditions and the potential consequences.

12. The Judge Advocate General Manual (JAGMAN) Investigating Officer stated that "the fact that the aircraft found itself in VRS condition with no apparent warning to the aircrew, but also departed controlled flight is particularly concerning."

13. On December 15, 2000, after a second crash of the V-22 that year, then-Secretary of Defense Bill Cohen determined that the accident history of V-22 aircraft and other testing issues required an independent, high-level review of the program. He established a Blue Ribbon Panel to review the safety of the V-22 aircraft and to recommend any proposed corrective actions.

14. This panel was briefed by the Government Accountability Office (GAO) and the contents of this brief were incorporated into a subsequent GAO report. The GAO report cited concerns about the adequacy of development tests conducted prior to the aircraft entering the operational test and evaluation phase and that completion of these tests would have provided further insights into the V-22 Vortex Ring State phenomenon. In particular, the GAO found that developmental testing was deleted, deferred or simulated in order to meet cost and schedule goals.

15. The original plan to test the flying qualities of the flight control system included various rates of descent, speeds, and weights. This testing would have provided considerable knowledge of MV-22 flight

qualities especially in areas related to the sudden loss of controlled flight following VRS onset. To meet cost and schedule targets, the actual testing conducted was less than a third of that originally planned." In addition, MV-22 pilots did not understand the optimum use of nacelle tilt to recover from VRS onset. In my opinion, this testing clearly could have prevented this tragic accident by providing the pilots the knowledge and training to either avoid or recover from VRS.

16. The GAO presentation also revealed that the JAGMAN Investigating Officer opined that the MV-22 Program Manager (PMA-275), Naval Aviation Training Systems (PMA-205) and the Contractor "needed to expedite incorporation of Vortex Ring State and Blade Stall warnings and procedures into the MV-22 NATOPS. The preliminary NATOPS manual and V-22 ground school syllabus provided insufficient guidance/warning as to high rate of descent/slow airspeed conditions and the potential consequences."

17. The GAO report also revealed that the Director, Operational Test & Evaluation (DOT&E) stated that "while the possible existence of VRS in the V-22 was known when flight limits for OPEVAL were established, the unusual attitude following entry into VRS was not expected." DOT&E goes on to say "thus, the first indication the pilot may receive that he has encountered this difficulty is when the aircraft initiated an uncommanded, uncontrollable roll."

As of this evening, I have not yet received a response to this letter. Again, I want to state that I wrote Rear Admiral Johnson on June 11 of 2009, and as of this time, I have not received a response. I am very disappointed.

I hope the Navy will follow the example of the Marine Corps and will help properly honor the sacrifices of these brave pilots who gave their lives in the service of their country.

With that, Mr. Speaker, I will ask God to continue to bless our men and women in uniform in Iraq and Afghanistan. I want to ask God, in His loving arms, to hold the families who have given a child dying for freedom in Afghanistan and Iraq, and I will ask God three times: Please, God; please, God; please, God; continue to bless America.

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Indiana (Mr. BURTON) is recognized for 5 minutes.

(Mr. BURTON of Indiana addressed the House. His remarks will appear hereafter in the Extensions of Remarks.)

THE EXPANDING POWER OF THE FEDERAL GOVERNMENT AND ITS INTRUSION INTO AMERICA'S BUSINESS

The SPEAKER pro tempore. Under a previous order of the House, the gentleman from Kansas (Mr. MORAN) is recognized for 5 minutes.

Mr. MORAN of Kansas. Mr. Speaker, unfortunately, here we go again—yet another attempt to expand the power of the Federal Government and to intrude further in America's business. Just like with cap-and-trade, which was forced upon Members without